

Claims

1. A method of extracting desired chemical species from pregnant animals urine which includes the steps of contacting the urine with dispersed particles of adsorber materials of a particle size above 200 microns and subsequently removing the species by washing the adsorber materials in a buffered aqueous solution of pH between 7.5 and 9.5.
2. A method as claimed in claim 1 in which the chemical species to be targeted are oestrogens, conjugated estrogens, equine chorionic gonadotropin, follicle stimulant hormone.
3. A method as claimed in claim 2 in which anionic exchange resin beads are used as the adsorber material.
4. A method as claimed in claim 2 or 3 in which the urine is filtered prior contact with the adsorber material.
5. Apparatus for the collection of valuable chemical species from pregnant animals urine which consists of a urine holding vessel suspended beneath the belly of the animal and a urine collection device attached to the perineum of the pregnant animal and communicating with the holding vessel in which the urine collection device and/or the holding vessel incorporates a removable urine permeable container containing an adsorbent material for said chemical species.
6. Apparatus for the collection of valuable chemical species from pregnant animals urine which consists of a urine holding vessel suspended beneath the belly of the mare and a urine collection device attached to the perineum of the mare and communicating with the holding vessel in which the urine holding vessel contains an organic water immiscible solvent for the chemical species.
7. Apparatus as claimed in claim 5 or 6 in which a filter is incorporated into the urine collection device upstream of the adsorber container.
8. Apparatus as claimed in claim 7 in which a funnel shaped polyamide mesh filter is incorporated in the urine collection device adjacent the mare's perineum.

9. Apparatus as claimed in claim 7 in which the filter is dosed with a mucolytic agent to remove mucous and mucosal cells and reduce viscosity.
10. Apparatus as claimed in claim 6 in which the solvent is hexanol and the chemical species is estrogen or conjugated estrogens.
11. Apparatus as claimed in claim 5 or 7 in which the adsorbent material is an anionic resin or mixture of anionic resins in bead form.